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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,300	09/10/1999	MOHAMED ANISUR RAHMAN	2925-237P	2520

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HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

MOORE, JAMES K

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/393,300	RAHMAN, MOHAMED ANISUR	
	Examiner	Art Unit	
	James K Moore	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 1992.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 25-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 11, 13-15, 19-22 and 24 is/are rejected.
- 7) ☒ Claim(s) 5-9, 12, 16-18 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, consisting of claims 1-24, in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the Examiner would not be unduly burdened if forced to examine Groups I and II. This is not found persuasive because the Examiner has determined that it would be a serious burden to examine both Groups I and II.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claim 20 is objected to because of the following informalities: in line 6, "public target value" should be changed to "private target value". See Figure 4, boxes S21 and S24. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 11, 13, 14, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lautenschlager et al. (U.S. Patent No. 6,321,096).

Regarding claim 1, Lautenschlager discloses a method for directing a data message (connection request) in a communications network including a first wireless system (MN) and a second wireless system (DECTS). The method comprises: transferring service from the first wireless system to the second wireless system if a measured signal parameter (radio field strength) meets or exceeds a target value; updating a central database (HLR) of user profiles in response to the transferring; and directing a data message (connection request) for a mobile station (MT) through the second wireless system, as facilitated by the central database, to deliver the data message to the mobile station during its operation on the second wireless system. See Figure 1; col. 2, lines 55-58; col. 3, lines 10-19 and 60-63; col. 4, lines 25-58; col. 7, lines 25-28; and col. 7, line 54 through col. 8, line 14.

Regarding claim 2, Lautenschlager discloses all of the limitations of claim 1, and also discloses that the method comprises scanning for forward channels of the second wireless system and measuring a received signal parameter (radio field strength) to provide the measured signal parameter. See col. 4, lines 25-32. It is also inherent that the method comprises scanning for forward channels of the first wireless system

(mobile radio network MN) because service is transferred to the first wireless system when the mobile station moves out of the range of the second wireless system. See col. 7, lines 1-13.

Regarding claim 3, Lautenschlager discloses all of the limitations of claim 1, and also discloses that the method comprises requesting the forwarding of the data message by sending a flag (DET) from the mobile station to the central database for storage in the central database. See col. 6, lines 21-38.

Regarding claim 11, Lautenschlager discloses all of the limitations of claim 1 and also discloses that the first wireless system (MN) is a public wireless system and that the second wireless system (DECTS) may be a private wireless system. See col. 2, lines 62-66 and col. 3, lines 41-45.

Regarding claims 13 and 20, Lautenschlager discloses a system for directing a data message (connection request) in a hybrid communications network including a private wireless system (DECTS) and a public wireless system (MN). The system comprises: a mobile switching center (MSC) for transferring service between the public wireless system to the private wireless system, if a measured signal parameter (radio field strength) meets or exceeds a private target value; a private branch exchange (DECTS) for transferring service between the public wireless system to the private wireless system, if a measured signal parameter meets or exceeds a private target value; a central database (HLR) of user profiles updated in response to the transferring; and a service node (DECTS base station) for directing a data message (connection request) for a mobile station (MT) through the private wireless system, as facilitated by

the central database, to deliver the data message to the mobile station during its operation on the private wireless system. See Figure 1; col. 2, lines 55-58 and 62-66; col. 3, lines 39-45 and 60-63; col. 4, lines 25-32; col. 6, lines 21-38 and 56-67; col. 7, lines 25-28; and col. 7, line 66 through col. 8, line 2.

Regarding claims 14 and 21, Lautenschlager discloses all of the limitations of claims 13 and 20, and also discloses that the mobile station scans for control channels of the private wireless system and includes a measurer (RD) for measuring the measured signal parameter (radio field strength). See col. 4, lines 25-32. It is also inherent that the mobile station scans for control channels of the public wireless system because service is transferred to the public wireless system when the mobile station moves out of the range of the private wireless system. See col. 7, lines 1-13.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lautenschlager in view of Raith (U.S. Patent No. 5,237,612).

Regarding claims 4, 15 and 22, Lautenschlager discloses all of the limitations of claims 1, 13, and 20, but does not disclose that the method comprises authenticating a

mobile station transferring from the first wireless system to the second wireless system or that the system comprises an authenticator associated with the private wireless system for authenticating a mobile station transferring from the public wireless system to the private wireless system. However, Raith teaches a communication network which authenticates a mobile station in order to reduce cellular fraud. See col. 5, line 41 through col. 6, line 37. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lautenschlager with Raith, such that the method comprises authenticating the mobile station transferring from the first wireless system to the second wireless system and that the system comprises an authenticator associated with the private wireless system for authenticating a mobile station transferring from the public wireless system to the private wireless system, in order to reduce cellular fraud.

7. Claims 10, 19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hentilä et al. (U.S. Patent No. 6,219,551) in view of Lautenschlager.

Regarding claim 10, Hentilä discloses a method for directing a data message (paging message) in a communications network including a first wireless system (GSM network) and a second wireless system (DECT system). The method comprises transferring service from the first wireless system to the second wireless system when a mobile station (subscriber B) determines it is in the second wireless system; updating a central database of user profiles in a service control point in response to the transfer; and directing a data message for the mobile station through the second wireless system, as facilitated by the central database, to deliver the data message to the mobile

station during its operation on the second wireless system. See Figure 1; col. 4, lines 42-48, 53-55, and 58-60; and col. 6, lines 11-13 and 40-49.

Hentilä does not disclose that the mobile station determines it is in the second wireless system if a measured signal parameter meets or exceeds a target value. However, Lautenschlager teaches a mobile station that determines that it is in a DECT system if a measured signal parameter (radio field strength) meets or exceeds a target value. See col. 4, lines 25-33. It is known to one of ordinary skill in the art that received radio field strength provides a good assessment of whether a signal may be reliably received. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hentilä with Lautenschlager, such that the mobile station determines it is in the second wireless system if a measured signal parameter meets or exceeds a target value, in order to provide the mobile station with a reliable way of determining whether it is within the range of the DECT base stations.

Regarding claims 19 and 24, Hentilä discloses a system for directing a data message (paging message) in a hybrid communications network including a private wireless system (DECT system) and a public wireless system (GSM network). The system comprises a mobile switching center for transferring service between the public wireless system to the private wireless system when a mobile station (subscriber B) determines it is in the private wireless system; a private branch exchange for transferring service between the public wireless system to the private wireless system when the mobile station determines it is in the private wireless system; a service control point for maintaining user profiles stored in a central database which are updated in

response to the transfer; and a service node (SSP) for directing the data message for the mobile station through the private wireless system, as facilitated by the central database, to deliver the data message to the mobile station during its operation on the private wireless system. See Figure 1; col. 4, lines 42-48, 53-55, and 58-60; and col. 6, lines 11-13 and 40-49.

Hentilä does not disclose that the mobile station determines it is in the private wireless system if a measured signal parameter meets or exceeds a target value. However, Lautenschlager teaches a mobile station that determines that it is in a DECT system if a measured signal parameter (radio field strength) meets or exceeds a target value. See col. 4, lines 25-33. It is known to one of ordinary skill in the art that received radio field strength provides a good assessment of whether a signal may be reliably received. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hentilä with Lautenschlager, such that the mobile station determines it is in the private wireless system if a measured signal parameter meets or exceeds a target value, in order to provide the mobile station with a reliable way of determining whether it is within the range of the DECT base stations.

Allowable Subject Matter

8. Claims 5-9, 12, 16-18, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

The present invention is directed to a method for directing a data message in a communications network including a first wireless system and a second wireless system. The method comprises transferring service from the first wireless system to the second wireless system if a measured signal parameter meets or exceeds a target value, and updating a central database of user profiles in response to the transfer.

Claim 5 identifies the uniquely distinct feature "sending to the central database a signaling message containing a mobile identifier, a mobile switching center identifier, and a cell identifier during or after transferring to the first wireless system."

Claim 6 identifies the uniquely distinct feature "sending to the central database a signaling message containing a mobile identifier, a private branch exchange identifier, and a private system identifier during or after the mobile station's transferring to the second wireless system."

Claim 7 identifies the uniquely distinct feature "updating a user profile in a home location register for the first wireless system based on the user profile in the central database."

Claim 8 identifies the uniquely distinct feature "assigning a private identifier number for the second wireless system based on a geographic location of a private wireless system as the second wireless system."

Claim 9 identifies the uniquely distinct feature "assigning a private identifier number for a corresponding second wireless system based on geographic coordinates of a mobile station within the second wireless system."

Claim 12 identifies the uniquely distinct feature "transferring service from a private wireless system as the first wireless system to a public wireless system as the second wireless system, if the measured signal parameter meets or exceeds the target value."

The closest prior art, Lautenschlager, discloses a method for directing a data message in a communications network including a first wireless system and a second wireless system. The method comprises transferring service from the first wireless system to the second wireless system if a measured signal parameter meets or exceeds a target value, and updating a central database of user profiles in response to the transfer. However, Lautenschlager fails to anticipate or render the above underlined limitations obvious.

The present invention is also directed to a system for directing a data message in a hybrid communications network including a private wireless system and a public wireless system. The system comprises a mobile switching center for transferring service between the public wireless system to the private wireless system if a measured signal parameter meets or exceeds a private target value, and a central database of user profiles updated in response to the transfer.

Claims 16 and 23 identify the uniquely distinct feature "wherein the central database is adapted to receive and store a signaling message containing a mobile switching center identifier, a cell identifier, and a private system identifier."

Claim 17 identifies the uniquely distinct feature "wherein the private wireless system includes a private branch exchange for assigning a private identifier number for the private wireless system based on a geographic location of the private wireless system."

Claim 18 identifies the uniquely distinct feature "wherein the private wireless system includes a base station controller for assigning a private identifier number for the private wireless system based on a geographic location of the private wireless system."

The closest prior art, Lautenschlager, discloses a system for directing a data message in a hybrid communications network including a private wireless system and a public wireless system. The system comprises a mobile switching center for transferring service between the public wireless system to the private wireless system if a measured signal parameter meets or exceeds a private target value, and a central database of user profiles updated in response to the transfer. However, Lautenschlager fails to anticipate or render the above underlined limitations obvious.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Moore, whose telephone number is (703) 308-

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6042. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached at (703) 308-6739.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ken Moore

1/30/03

JKM


VIVIAN CHIN
SUPERVISOR / PATENT EXAMINER
TECHNOLOGY CENTER 2600